

NEW CLAIMS

31. A scan module for scanning indicia to be electro-optically read, the module comprising:

- a) a substrate having a generally planar substrate portion lying in a substrate plane, and a raised substrate portion elevated above the substrate plane;
- b) a scan element mounted on the raised substrate portion, and including an oscillatable scan mirror lying in a mirror plane inclined relative to the substrate plane;
- c) a focusing lens integrally connected to the substrate;
- d) a light source integrated with the substrate and the scan element, and operative for emitting a light beam in a direction parallel to the substrate plane through the focusing lens to the scan mirror for reflection therefrom at an angle away from the substrate as a focused scanning beam; and
- e) a magnifying lens integrally connected to the substrate in juxtaposition with the scan mirror, and operative for magnifying the angle of reflection of the focused scanning beam.

32. The module of claim 31, wherein the substrate is constituted of a semiconductor material.

33. The module of claim 31, wherein the raised substrate portion has a surface inclined at a 45° angle relative to the substrate plane.

34. The module of claim 31, wherein the scan element includes torsion hinges for supporting the scan mirror for oscillating movement.

35. The module of claim 31, wherein the light source is a semiconductor laser diode for emitting the light beam as a laser beam.

36. The module of claim 31, wherein the focusing lens is a convex lens.

37. The module of claim 31, wherein the magnifying lens is a concave lens.

38. The module of claim 31, wherein the focusing lens and the magnifying lens have optical powers of opposite polarity.

39. The module of claim 31; and further comprising a support in which the substrate, the scan element, the focusing lens and the light source are accommodated, wherein the support has an opening, and wherein the magnifying lens is mounted at the opening of the support.